

Bottom Up Project Cost and Risk Modeling, Phase I

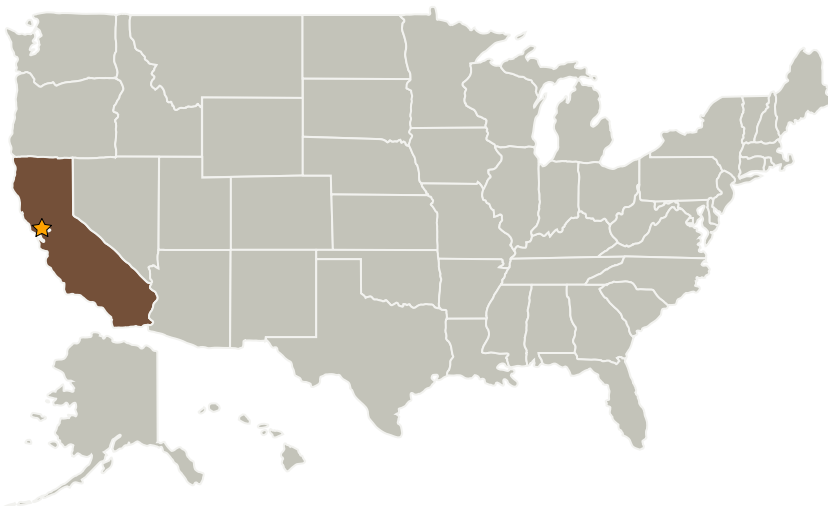
Completed Technology Project (2009 - 2009)



Project Introduction

Microcosm along with its partners HRP Systems, End-to-End Analytics, and ARES Corporation (unfunded in Phase I), propose to develop a new solution for detailed data gathering to support improved ground-up cost estimation. It will enable frequent collection and archiving of cost and other data down to the lowest WBS (Work Breakdown Structure) levels. Current parametric space system cost estimation tools such as NAFCOM (NASA/Air Force Cost Model) and SSCM (Small Satellite Cost Model) provide good results when schedules and design and management approaches are similar to those in their existing databases --primarily traditional approaches, but they can fall-flat when applied to programs focused on rapid design and development and/or very low costs. To address these types of programs, more and better data is required. The Microcosm team proposes an approach similar to and complementary to earned value data collection and reporting. In addition to gathering detailed actuals, this approach also requires cost and schedule forecast updates and forecast uncertainty estimates to be updated and collected as well as supplementary explanatory information. With this additional data models can be improved, and program and task managers can be trained to become better forecasters.

Primary U.S. Work Locations and Key Partners



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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Ames Research Center (ARC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Organizations Performing Work	Role	Type	Location
★ Ames Research Center(ARC)	Lead Organization	NASA Center	Moffett Field, California
Microcosm, Inc.	Supporting Organization	Industry Women-Owned Small Business (WOSB)	Hawthorne, California

Primary U.S. Work Locations

California

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX16 Air Traffic Management and Range Tracking Systems
 - └ TX16.3 Traffic Management Concepts